## IN THE CLAIMS

Please make the following claim substitutions: 1. (Currently amended) A method for use in a node of a packet network, the method comprising the steps of: storing location information of other nodes of the packet network, wherein said 3 location information comprises a global position represented by at least two 4 coordinates; and 5 exchanging the stored location information with adjacent nodes of the packet 6 network. 7



3

1

2

3

4

5

6

7

8

9

1

2

3

4

5

6

1

- 2. (Original) The method of claim 1 wherein the stored location information further comprises associated time-stamp information for indicating an age of the location information of the other nodes.
- 3. (Currently amended) A method for use in a node of a packet network, the method comprising the steps of:

storing location information of other nodes of the packet network, wherein said location information comprises a global position represented by at least two coordinates;

receiving location information from  $\frac{1}{2}$ t least one adjacent node of the packet network; and

merging the received location information with the stored location information for updating to update the stored location information to more current values.

- 4. (Currently amended) The method of claim 3, wherein the stored location information further comprises associated time-stamp information for indicating to indicate an age of the location information of the other nodes and wherein the merging step compares time-stamp information of said received location information to timestamp information of said stored location information for determining the more current values.
  - 5. (Currently amended) A method for use in a node of a packet network, the

method comprising the steps of:

transmitting location information of the node to <u>other</u> nodes of the <del>packet</del> network that are a part of a local topology of the node, <u>wherein said location information</u> comprises a global position represented by at least two coordinates; and

transmitting a location list to nodes of the local topology that are adjacent, wherein the location list comprises location information of at-least-some at least some of the nodes of the packet network.

- 6. (Currently amended) The method of claim 5, wherein the location list further comprises associated time-stamp information for indicating to indicate an age of the location information of the at-least some at least some of the nodes of the packet network.
- 7. (Original) The method of claim 5 wherein at least one of the transmitting steps is periodically performed.
- 8. (Currently amended) The method of claim 5, further comprising the steps of: receiving location information from at least one adjacent node of the local topology; and

merging the received location information with the location list for updating to update the location list to more current values.

- 9. (Currently amended) Apparatus for use in a node of a packet network, the apparatus comprising:
- a global positioning system receiver for determining location information of the node:
- a memory for storing a location list comprising location information for other nodes of the packet network, wherein said location information comprises a global position represented by at least two coordinates; and
- a communications interface for transmitting, at different times, the determined location information of the node, and the stored location list, to at least one <u>other</u> node of the <del>packet</del> network.

10. (Currently amended) Apparatus for use in a node of a packet network, the
apparatus comprising:
a memory for storing a location list comprising location information for other
nodes of the packet network; and
means for generating a location list comprising location information for other
nodes of the network, wherein said location information comprises a global position
represented by at least two coordinates; and
a communications interface for transmitting the stored generated location list to
at least one adjacent node of the packet network.
11. (Currently amended) The apparatus of claim 10, further comprising a
processor, and wherein the communications interface receives a location list from at
least one adjacent node of the packet network and the processor merges the received
location list with the stored location list for updating to update the stored location list to
more current values.
12. (New) The method of claim 1, wherein said node stores a local topology
and said node stores said location information of other nodes within and outside said
local topology.
13. (New) The method of claim 12, wherein said node uses a geometry-based
routing protocol to transmit said location information to nodes outside of said local
topology.
14. (New) The method of claim 13, wherein said node determines a distance
from a destination node outside of said local topology to nodes in said local topology
using said geometry-based routing protocol and said location information to identify the
closest node in said local topology for routing to said destination node.
15. (New) The method of claim 1, wherein said node determines said
coordinates from information received from a global positioning system.

16. (New) A method for use in a node of a network comprising:

transmitting location information of the node to other nodes of the network that
are a part of a local topology of the node, wherein said location information comprises a
global position represented by at least two coordinates;
receiving location information from at least one adjacent node of the network;
and
updating said location information stored at said node with said received location

 $\mathcal{G}^{2}$ 

2

3

7

8

1

2

3

1

2

3

4

5

6

information.

- 17. (New) The method of claim 12, said local topology of said node being nodes located within a predetermined number of hops from said node.
- 18. (New) The method of claim 17, wherein said local topology of said node comprises a first set of nodes having a point-to-point link to said node and a second set of nodes having a point-to-point link to a node in said first set of nodes.
  - 19. (New) A method for use in a node of a network, comprising:
- a) receiving a location list comprising location information for other nodes of the network from at least one adjacent/node, wherein said location information comprises a global position represented by at least two coordinates;
  - b) storing said location list
  - c) transmitting the stored location list to at least one adjacent node; and
- d) repeating steps a) through c).